

REMARKS

This paper is being filed with an RCE and in response to the Final Office Action mailed from the Office on August 4, 2008 (hereinafter, the "Office Action").

Applicants respectfully request reconsideration of the present application in view of the amendments set forth above and the remarks below.

Claims 1, and 3 - 5 are currently pending in the present application. Claims 2 and 6 were previously cancelled, and claims 7- 10 were previously withdrawn.

Claims 1 and 5 have been amended to more clearly recite the subject matter of the invention. Support for the amendments can be found throughout the application filed on September 14, 2005.

Claims 11 - 25 are new. Support for new claims can be found throughout the as-filed application.

Of the claims entered in this amendment, claims 1 and 11 are independent claims. Claims 3 - 5 are dependent directly or indirectly from claim 1, and claims 12 - 25 are dependent directly or indirectly from claim 11.

The Prior Art Rejections:

The Examiner has rejected claim 1 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,811,751 to Leong et al (hereinafter, "Leong") in view U.S. Pat. No. 6,163,010 to Kobsa (hereinafter, "Kobsa"). Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leong and Kobsa as applied to claim 1, and in further view of U.S. Pat. No. 4,475,681 to Ingle (hereinafter, "Ingle").

Amended claim 1 is directed toward a probe positioning and bonding device including a stage unit disposed on a working table and supporting a probe substrate including a probe site to which at least one probe is bonded, a microscope movably disposed above the stage unit while being supported by means of a first supporting member disposed on the working table, a probe fixing unit disposed above the stage unit and below the microscope while being supported by means of a second supporting member disposed on the working table, the probe fixing unit gripping a probe and positioning the probe to the probe site of the probe substrate and moving

along the second supporting member vertically to the working table, and a light source unit supported by means of a third supporting member disposed on the working table, the light source unit being disposed toward the upper part of the stage unit, wherein the light source unit is a laser-generating apparatus.

The applied art is not understood to disclose or suggest the foregoing features of claim 1. In particular, Leong is not understood to disclose or suggest at least the claimed “probe fixing unit . . . moving along the second supporting member vertically to the working table”.

In Leong, the probe heads 18 and 19, which correspond to the probe fixing unit of the present invention, may be positioned on the platen 17 corresponding to the second supporting member of the present invention (see Leong, FIG. 1 and column 5, lines 42 - 55). However, the probe heads 18 and 19 cannot move vertically to the base machine 10 corresponding to the working table. According to the present invention, the probe fixing unit moves along the second supporting member vertically to the working table, and thus the probe may be easily replaced with another after completing the probe bonding process. Kobsa fails to cure this defect of Leong. Instead, Kobsa discloses a laser cutting apparatus for laser cutting of work pieces (see Abstract of Kobsa).

Moreover, neither Leong nor Kobsa, alone or in combination, is understood to disclose or suggest “a microscope . . . being supported by means of a first supporting member disposed on the working table” or “a light source unit supported by means of a third supporting member disposed on the working table” of the claimed invention. Instead, Leong describes that “a multi-wavelength laser 24 is mounted with the microscope 22 . . . fitting right on the microscope 22” (see Leong, column 5, lines 63 - 66). Applicants assert that the claimed light source supported by a third supporting member and a microscope supported by a second supporting member is clearly different from a laser (light source) mounted with a microscope as described in Leong. Further, Applicants assert that Leong teaches away from the claimed invention by explicit reference in the text and figures (for example, FIG. 1) to a laser mounted with a microscope. Kobsa fails to cure this defect of Leong because Kobsa describes only a laser beam assembly 90

and fails to describe a microscope, instead describing a CCD camera assembly 102 (see Kobsa, FIG. 1 and corresponding text).

Accordingly, for at least the reasons described above, even if Leong and Kobsa were combined, the resulting hypothetical combination would not disclose or suggest all the elements and limitations of claim 1. Therefore, Applicants submit that the Examiner has failed to establish a prima facie case for obviousness. Thus, Applicants submit that claim 1 is patentable and request withdrawal of the art rejection.

Applicants submit that dependent claims, namely claims 3 - 5, now depend on allowable subject matter.

Claim 4 is further patentable over Ingle since the reference does not describe or contemplate a probe fixing unit "slidably moved on the second support member."

Examiner alleges Ingle describes the claimed "probe fixing unit further comprises a z-axis moving stage connected to the bracket such that the stage is slidably moved on the second supporting member." See Office Action, page 5. Applicants disagree.

Ingle discloses a bonding device 28 that pivots on support arms 44 and 46 along pivot axes 48 and 52. Applicants respectfully submit that the complex pivoting movements of the bonding device are clearly different than a probe fixing unit slidably moved on the second support member. While claim terms are interpreted as broadly as reasonably allowed, the words of a claim must be given their plain meaning unless the plain meaning is inconsistent with the specification (*In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004), *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) and MPEP §2111.01). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313, 75 USPQ 2d 1321, 1326 (Fed. Cir. 2005) (en banc).

Applicants respectfully submit that one of ordinary skill in the art understands that pivot movement of the bonding device in Ingle is directed toward complex pivoting or rotating movements about the combined pivot axes along the combined support arms, whereas, in strong contrast, movement of the probe fixing unit in claim 1 is directed toward slidable vertical movement on the support member. Such slidable vertical movement facilitates alignment of the probe fixing unit in one direction with the substrate.

Claim 5 is further patentable over Leong, Kobsa, and Ingle since the references do not describe or contemplate the claimed “adjusting member for adjusting the position of the pincette in the x direction by a rotation about the x direction”.

New claim 11 has corresponding features to claim 1. Therefore, Applicants submit that claim 11 is patentable for at least the same reasons as claim 1. Applicants further submit that claim 11, and the dependent claims therefrom, is patentable over Leong, Kobsa, and Ingle because the references do not disclose or suggest “a microscope coupled to a first guide member positioned at a first portion of the working table” and “a light source unit movably coupled to a second guide member positioned at a second portion of the working table,” as in claim 11. Such independence enables the light source to be independently positioned with respect to the microscope to, for example, focus light at locations independently of the microscope and without constraint from the microscope.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Respectfully submitted,

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